ABSTRACT OF THE DISCLOSURE

A network device may perform traffic policing to determine if incoming data cells are in conformance with policing parameters, including a theoretical arrival time (TAT), for each cell's communication channel. Each cell may have an arrival time according to a timer value. The timer value and TAT may rollover upon reaching a maximum value. The network device may be configured to account for such rollovers when determining cell conformance. For each communication channel, a table entry may include the policing parameters and rollover data. Each entry may also include operations and maintenance (OAM) data. The rollover data indicates the rollover phase relationship between the timer value and TAT parameter for each channel. The rollover data may be updated each rollover phase of the timer, for example as part of an OAM table scan process. The network device may be an Asynchronous Transfer Mode (ATM) traffic policing device or switch.